

Title (en)  
BI-DIRECTIONAL BATTERY POWER INVERTER

Title (de)  
BIDIREKTIONALER BATTERIEWECHSELRICHTER

Title (fr)  
ONDULEUR DE BATTERIE BIDIRECTIONNEL

Publication  
**EP 1882299 A1 20080130 (DE)**

Application  
**EP 06742297 A 20060429**

Priority  
• DE 2006000755 W 20060429  
• DE 102005023290 A 20050520

Abstract (en)  
[origin: US2008094860A1] Disclosed is a bi-directional battery power inverter ( 1 ) comprising a DC-DC converter circuit element ( 3 ) to which the battery ( 2 ) can be connected in order to generate an AC output voltage from a battery ( 2 ) voltage in a discharging mode while charging the battery ( 2 ) in a charging mode. The inverter ( 1 ) further comprises an HF transformer which forms a resonant circuit along with a resonant capacitor ( 6 ). In order to increase the efficiency of said battery power inverter, the transformer is provided with two windings ( 11,12 ) with a center tap ( 20 ) on the primary side, said center tap ( 20 ) being connected to a power electronic center-tap connection with semiconductor switches ( 21,31 ) while a winding ( 13 ) to which the resonant capacitor ( 6 ) is serially connected provided on the secondary side.

IPC 8 full level  
**H02M 7/797** (2006.01); **H02M 7/538** (2007.01)

CPC (source: EP KR US)  
**H02M 3/3372** (2013.01 - EP US); **H02M 7/537** (2013.01 - KR); **H02M 1/0058** (2021.05 - EP US); **H02M 1/007** (2021.05 - EP US); **Y02B 70/10** (2013.01 - EP US)

Citation (search report)  
See references of WO 2006125410A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**US 2008094860 A1 20080424; US 7746669 B2 20100629**; AT E454744 T1 20100115; AU 2006251711 A1 20061130; AU 2006251711 B2 20091224; CN 101180787 A 20080514; CN 101180787 B 20101117; DE 102005023290 A1 20061123; DE 502006005851 D1 20100225; EP 1882299 A1 20080130; EP 1882299 B1 20100106; ES 2336140 T3 20100408; KR 100966418 B1 20100628; KR 20080016559 A 20080221; US RE45069 E 20140812; WO 2006125410 A1 20061130

DOCDB simple family (application)  
**US 97711507 A 20071023**; AT 06742297 T 20060429; AU 2006251711 A 20060429; CN 200680017589 A 20060429; DE 102005023290 A 20050520; DE 2006000755 W 20060429; DE 502006005851 T 20060429; EP 06742297 A 20060429; ES 06742297 T 20060429; KR 20077026655 A 20060429; US 201213537381 A 20120629